Academically Unacceptable High Schools in Texas Urban Districts and Implications for HB 3

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Major Conclusion

While this bill certainly makes many positive changes to the current system, the ultimate result of the proposed accountability system may be to simply reduce the number and percentage of schools deemed "low-performing" while doing little to actually drive student performance forward. Indeed, I see nothing substantial in HB 3 that would substantially alter the core technology of education—teaching and learning. Under the proposed system, we will still experience a shortage of well-qualified teachers and the students and schools that need the best and brightest teachers will be the least likely to have access to them. This will be no different than our current system. Thus, many students—in particular, poor and/or minority students—will still be short-changed by an education system that systematically provides them less access to the well-qualified teachers that they need to be successful.

What we need to create is a system that holds schools and districts accountable for student outcomes while holding districts and the state accountable for providing the resources necessary to achieve those outcomes. Currently, the system works in an extremely heavy-handed manner to hold school communities accountable for student performance, often in situations in which a lack of adequate resources makes success nearly impossible. Rather than being reactive, the system should be proactive and provide incentives to districts to provide adequate resources—especially with respect to teacher quality—to all schools, especially those serving poor and/or minority students who tend to underachieve in comparison to their peers.

In this paper, I examine some of the factors associated with academically unacceptable schools—namely, grossly under-prepared students and poor teacher quality. After establishing the extent of these two factors and their association with schools being labeled academically unacceptable, I argue that the current version will do little to change these factors, thus have little direct impact on driving improvements in student learning.

Background

There are many commonly held beliefs about the causes of low-performing high schools. When identifying the causes of low-performing schools, researchers and policymakers often identify the following areas: poor teacher quality, high teacher turnover, lack of community support, low parental levels of education, high poverty rates, poorly designed tests, and draconian accountability systems. One over-looked cause is the ability level of the students entering high schools from middle school.

This analysis focuses on urban high schools in Texas rated academically unacceptable at least three academic years from 2003¹ through 2008. I used data from TEA to analyze the ability level of incoming 9th graders on the TAKS mathematics exam for schools rated as academically unacceptable (AU) in two different ways.

¹ Accountability ratings were not assigned in 2003. In this analysis, the school's 2002 accountability rating was used as the school's 2003 rating.

Description of Analyses

In Analysis A, I identified schools that had been designated as AU at least three times over the academic years 2002-03 through 2007-08. I then compared each of these schools to the five urban schools with demographics most similar to the original school. I also compared the original set of AU schools to other schools in the same set of districts that had been designated as AU only once or twice as well as to schools in the same district that had never been designated as AU. Finally, I compared the original set of AU schools to high schools in other districts located in metro areas from around the state. In Analysis B, I analyze data based on the number of times a school has been designated as AU over the same time period.

Findings

As shown in Appendix A and Appendix B, both analyses reveal that schools designated as AU had a far greater the percentage of incoming 9th grade students who performed substantially below expectations on the 8th grade mathematics TAKS and the greater the percentage performing substantially below expectations, the greater the number of years a school was designated as AU. In other words, schools that receive substantial percentages of very low-performing students appear to be more likely to be rated as AU than other schools.

This relationship is presented in Tables 1 and 2 below.

Table 1: Number of Schools with Selected Percentages of 9th grade Students Who Scored Below 2000 on the TAKS Mathematics Exam in 8th Grade (2006)

Number Students Scoring Below 2000 Scale Score								
Years Rated		on the	8th Grade Ma	th TAKS 2006		Total		
AU (03 to 08)	< 5%	6 5-10% 10-20% 20-27.5% > 27.5%						
0	217	241	319	88	32	897		
1	5	15	40	43	32	135		
2	0	1	4	13	12	30		
3+	0	0	2	5	19	26		
Total	222	257	365	149	. 95	1088		

Table 2: Percentage of Schools with Selected Percentages of 9th grade Students Who Scored Below 2000 on the TAKS Mathematics Exam in 8th Grade (2006)

Number Years Rated								
AU (03 to 08)	< 5%	< 5% 5-10% 10-20% 20-27.5% > 27.5%						
0	24.2	26.9	35.6	9.8	3.6	100.0		
1	3.7	11.1	29.6	31.9	23.7	100.0		
2	0.0	3.3	13.3	43.3	40.0	100.0		
3+	0.0	0.0	7.7	19.2	73.1	100.0		
Total	20.4	23.6	33.5	13.7	8.7	100.0		

Further, schools rated AU have lower teacher quality as measured by the percentage of core course teacher FTEs assigned out-of-field and not fully certified. These results are shown in Tables 3 and 4.

Table 3: Percentage of Core Course Teacher FTEs Assigned Out-of-Field by the Number of Years Rated Academically Unacceptable (2003 to 2008)

Number Years Rated		Percentage of Core Course Teacher FTEs Assigned Out-of-Field 2003 2004 2005 2006 2007 2008							
AU (03 to 08)	2003								
0	25.8	17.9	22.3	22.2	22.3	22.9			
1	31.1	24.1	29.1	27.2	28.9	31.0			
2	29.2	25.7	28.6	28.0	33.6	37.5			
3+	41.1	29.8	33.3	33.1	33.9	34.3			
Total	26.8	19.2	23.5	23.2	23.6	24.4			

Table 4: Percentage of Core Course Teacher FTEs Not Fully Certified by the Number of Years Rated Academically Unacceptable (2003 to 2008)

Number Years Rated		Percentage of Core Course Teacher FTEs Not Fully Certified							
AU (03 to 08)	2003	2004	2005	2006	2007	2008			
0	13.1	8.9	10.5	10.3	10.6	11.5			
1	19.8	14.2	17.9	15.1	17.5	18.5			
2	17.8	15.4	20.6	19.7	24.3	28.5			
3+	27.5	18.7	19.8	17.7	22.1	23.0			
Total	14.3	10.0	11.8	11.3	12.0	13.0			

This same relationship is evident when analyzing teacher quality across schools with varying percentages of 9th grade students scoring below 2000 on the 8th Grade TAKS math test. This importance of scoring below 2000 is that students scoring below this particular cut point have a substantially lower probability of passing the 11th grade TAKS math test. As shown in Table 5 through Table 7, schools with the greatest percentage of students scoring below 2200 had far lower teacher quality across all measures. In other words, the students most in need of well-qualified teachers are the least likely ro have access to them.

Table 5: Teacher Quality Measures for Schools with Selected Percentages of 9th Grade Students in 2007 Scoring Below 2000 on the 8th Grade Math TAKS Test in 2006

% Students Below	% C	Core Course To	Es Percentage of Teacher FT		
2000 on 8th Grade	Out-of-	Not Fully	Bottom Quintile	Zero Years of	1-5 Years of
Math TAKS (2006)	Field	Certified	PPR Cert Exam	Experience	Experience
< 5%	15.6	7.0	18.1	6.4	21.1
5-10%	16.1	8.1	19.2	6.2	22.5
10-20%	19.4	10.2	23.3	8.0	23.8
20-27.5%	23.6	13.5	27.5	9.3	27.2
> 27.5%	28.9	17.8	33.5	10.7	27.9
Total	19.4	10.3	23.0	7.7	23.9

Table 6: Percentage of Teacher FTEs Assigned Out-of-Field in Core Course Areas by Selected Percentages of 9th Grade Students in 2007 Scoring Below 2000 on the 8th Grade Math TAKS Test in 2006

% Students Below 2000 on 8th Grade	Percentage of Teacher FTEs Assiged Out-of-Field in 2007							
Math TAKS (2006)	English	Mathematics	Science	Soc Studies				
< 5%	15.2	23.3	22.0	31.9				
5-10%	14.3	27.1	31.3	30.1				
10-20%	17.1	29.0	34.1	31.2				
20-27.5%	18.7	35.8	35.1	27.4				
> 27.5%	25.3	39.9	37.7	30.8				
Total	17.1	29.6	31.7	30.5				

Table 7: Mathematics Teacher Quality Measures (2007) by Selected Percentages of 9th Grade Students in 2007 Scoring Below 2000 on the 8th Grade Math TAKS Test in 2006

% Students Below	% of Teach	% of Teacher FTEs		Percent of	% Teachers
2000 on 8th Grade	Assigned Out-	Not Fully	Beginning	Novice	Failing Math
Math TAKS (2006)	of-Field	Certified	Teacher FTEs	Teacher FTEs	Cert Exam
< 5%	7.5	5.1	3.5	3.9	23.3
5-10%	11.0	8.7	6.1	6.9	27.1
10-20%	11.9	9.1	6.2	7.3	29.0
20-27.5%	17.7	14.0	8.7	10.3	35.8
> 27.5%	23.7	20.3	13.8	15.1	39.9
Total	12.9	10.1	6.8	7.8	29.6

Implications for HB 3

Schools with lower performing students clearly have greater difficulty in recruiting and retaining well-qualified teachers (as well as effective teachers as measured by student growth) than schools with higher performing students. This has been found to be true by researchers across the country as well as in Texas. Regardless of whether we use the old accountability system or the proposed system in HB 3, a fair number of middle and high schools will continue to receive a large proportion of students far below grade level or not on track to be either proficient or college ready. Such schools will continue to have difficulty in recruiting and retaining well-qualified teachers even under the proposed changes. Indeed, I see nothing in HB 3 that will likely change the current situation in which the students most in need of the most well-qualified teachers actually gain access to such teachers.

One may argue that fewer schools will be designated as "low-performing" under the proposed system and the lack of such a "scarlet letter" will make it easier for schools with lower performing students to recruit and retain well-qualified teachers. However, high school teachers are acutely aware of the abilities of students and the preference of most teachers is to teach students who are close to or on grade level. This is especially true in mathematics in which we place all students in Algebra I. high school mathematics teachers simply find it next to impossible to teach Algebra I to students who have never passed as TAKS mathematics test and who cannot perform relatively simple mathematical calculations much less have a rudimentary

grasp of the basic pre-algebraic concepts necessary to be successful in Algebra I. Thus, unless other policies and strategies are adopted that provide serious incentives for well-qualified teachers to teach in lower performing elementary schools, middle schools, and high schools, I fear that we will not have any different results in terms of real student learning and college readiness in ten years than we have currently.

What we need to create is a system that holds schools and districts accountable for student outcomes while holding districts and the state accountable for providing the resources necessary to achieve those outcomes. Currently, the system works in an extremely heavy-handed manner to hold school communities accountable for student performance, often in situations in which a lack of adequate resources makes success nearly impossible. Rather than being reactive, the system should be proactive and provide incentives to districts to provide adequate resources—especially with respect to teacher quality—to all schools, especially those serving poor and/or minority students who tend to underachieve in comparison to their peers.

In sum, while the proposed accountability system will likely be perceived as "fairer" by many educators and parents because fewer schools will be designated as low-performing, I simply do not see any effective drivers in this bill that alter real student learning through the provision of well-qualified teachers to those students most in need of high-quality instruction

Analysis A: Urban High Schools Rated

Table A-1: Percentage of 9^h Grade Students Scoring Within Selected Scale Score Ranges on the 8th Grade TAKS Mathematics Test in 2003 by School Performance Level

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	Number	Grade 8 Math Scale Score Range						
School	of	1250 to	2000 to	2100 to	2300 to			
Group	Schools	1999	2099	2299	Highest			
AU (3 or more yrs)	20	48.1	29.6	20.1	2.2			
AU Comparison Schools	26	35.2	30.7	28.5	5.6			
AU Schools in Same District	22	39.9	29.8	24.9	5.3			
Non-AU Schools in Same Districts	37	24.1	23.9	37.7	14.3			
Other Metro high Schools	94	16.3	21.6	42.5	19.7			
Total	199	24.2	24.4	36.8	14.5			

Table A-2: Percentage of 9^h Grade Students Scoring Within Selected Scale Score Ranges on the 8th Grade TAKS Mathematics Test in 2004 by School Performance Level

	Number	Number Grade 8 Math Scale Score Range				
School	of	1250 to	2000 to	2100 to	2300 to	
Group	Schools	1999	2099	2299	Highest	
AU (3 or more yrs)	20	44.5	20.3	28.5	6.7	
AU Comparison Schools	26	36.7	21.1	32.5	9.7	
AU Schools in Same District	22	37.3	20.2	31.9	10.5	
Non-AU Schools in Same Districts	37	23.1	17.3	36.4	23.2	
Other Metro high Schools	94	17.0	15.8	37.6	29.6	
Total	199	24.0	17.4	35.7	22.9	

Table A-3: Percentage of 9^h Grade Students Scoring Within Selected Scale Score Ranges on the 8th Grade TAKS Mathematics Test in 2005 by School Performance Level

	Number	Grade 8 Math Scale Score Range			
School	of	1250 to	2000 to	2100 to	2300 to
Group	Schools	1999	2099	2299	Highest
AU (3 or more yrs)	20	45.7	20.4	28.4	5.5
AU Comparison Schools	26	32.7	21.1	35.9	10.3
AU Schools in Same District	22	37.5	19.6	32.7	10.2
Non-AU Schools in Same Districts	37	21.7	16.2	39.2	22.9
Other Metro high Schools	94	13.9	14.0	42.2	29.9
Total	199	21.3	16.1	39.3	23.3

Table A-4: Percentage of 9^h Grade Students Scoring Within Selected Scale Score Ranges on the 8th Grade TAKS Mathematics Test in 2006 by School Performance Level

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	Number	Gra	ade 8 Math Sc	ale Score Ran	ge
School	of	1250 to	2000 to	2100 to	2300 to
Group	Schools	1999	2099	2299	Highest
AU (3 or more yrs)	20	34.2	26.1	32.3	7.5
AU Comparison Schools	26	21.5	23.1	42.1	13.3
AU Schools in Same District	22	24.6	23.4	38.0	14.0
Non-AU Schools in Same Districts	37	14.6	16.6	40.9	27.8
Other Metro high Schools	94	9.3	14.1	42.2	34.4
Total	199	14.3	17.0	41.1	27.6

Table A-5: Percentage of 9^h Grade Students Scoring Within Selected Scale Score Ranges on the 8th Grade TAKS Mathematics Test in 2007 by School Performance Level

	Number	Gra	ade 8 Math Sc	ale Score Ran	ge
School	of	1250 to	2000 to	2100 to	2300 to
Group	Schools	1999	2099	2299	Highest
AU (3 or more yrs)	20	28.1	23.5	41.4	7.1
AU Comparison Schools	26	18.5	19.7	48.6	13.2
AU Schools in Same District	22	20.1	21.2	45.8	12.9
Non-AU Schools in Same Districts	37	12.0	14.1	46.0	27.9
Other Metro high Schools	94	8.2	12.1	47.0	32.7
Total	199	12.1	14.7	46.6	26.6

Analysis B

Table B-1: Percentage of 9th Grade Students Scoring Within Selected Scale Score Ranges on the 8th Grade TAKS Mathematics Test in 2003 by Number of Years

Rated Academically Unacceptable (2003 to 2008)

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Number	Number	Grade 8 Math Scale Score Range			
Years Rated	of	1250 to	2000 to	2100 to	2300 to
AU (03 to 08)	Schools	1999	2099	2299	Highest
0	930	20.1	24.6	40.3	15.0
1	140	33.2	28.4	31.1	7.4
2	30	38.9	29.9	26.2	4.9
3	17	44.2	29.6	23.6	2.6
4	6	56.1	27.3	15.0	1.6
5	2	51.7	27.8	18.1	2.4
6	1	40.8	34.4	22.6	2.2
All Schools	1172	22.9	25.3	38.3	13.5

Table B-2: Percentage of 9^h Grade Students Scoring Within Selected Scale Score Ranges on the 8th Grade TAKS Mathematics Test in 2003 by Number of Years Rated Academically Unacceptable (2003 to 2008)

reactive reactive (2005 to 2000)					
Number	Number	Grade 8 Math Scale Score Range			
Years Rated	of	1250 to	2000 to	2100 to	2300 to
AU (03 to 08)	Schools	1999	2099	2299	Highest
0	930	20.6	17.4	37.7	24.3
1	140	34.0	19.6	32.7	13.7
2	30	39.5	21.7	30.7	8.1
3	17	42.3	19.8	30.9	7.0
4	6	48.9	21.4	24.9	4.8
5	2	50.2	20.0	20.9	8.8
6	1	40.0	20.8	31.3	7.9
All Schools	1172	23.3	17.9	36.7	22.2

Table B-3: Percentage of 9^h Grade Students Scoring Within Selected Scale Score Ranges on the 8th Grade TAKS Mathematics Test in 2003 by Number of Years

Rated Academically Unacceptable (2003 to 2008)

Number	Number	Grade 8 Math Scale Score Range			
Years Rated	of	1250 to	2000 to	2100 to	2300 to
AU (03 to 08)	Schools	1999	2099	2299	Highest
0	930	18.1	16.0	41.7	24.2
1	140	31.4	19.5	35.5	13.6
2	30	38.6	21.1	32.1	8.2
3	17	44.0	19.9	29.5	6.5
4	6	51.5	18.8	25.8	3.9
- 5	2	51.9	22.9	21.7	3.5
6	1	30.6	24.5	36.2	8.6
All Schools	1172	20.8	16.6	40.4	22.1

Table B-4: Percentage of 9^h Grade Students Scoring Within Selected Scale Score Ranges on the 8th Grade TAKS Mathematics Test in 2003 by Number of Years

Rated Academically Unacceptable (2003 to 2008)

Number	Number	Grade 8 Math Scale Score Range			
Years Rated	of	1250 to	2000 to	2100 to	2300 to
AU (03 to 08)	Schools	1999	2099	2299	Highest
0	930	11.8	16.6	43.1	28.4
1	140	21.9	21.9	39.9	16.3
2	30	27.8	25.2	36.0	11.0
3	17	33.0	25.4	33.0	8.6
4	6	35.9	27.9	30.9	5.2
5	2	41.7	24.5	24.8	9.1
6	1	24.6	26.3	40.9	8.2
All Schools	1172	13.9	17.7	42.3	26.1

Table B-5: Percentage of 9^h Grade Students Scoring Within Selected Scale Score Ranges on the 8th Grade TAKS Mathematics Test in 2003 by Number of Years Rated Academically Unacceptable (2003 to 2008)

Number Number Grade 8 Math Scale Score Range Years Rated of 1250 to 2000 to 2100 to 2300 to AU (03 to 08) Schools 1999 2099 2299 Highest 930 10.3 13.7 48.3 27.8 47.3 1 140 17.6 18.4 16.7 2 30 22.7 22.2 44.3 10.7 3 17 27.3 22.8 41.7 8.2 4 6 29.8 24.4 39.3 6.4 5 2 29.5 23.7 6.4 40.4 6 19.3 20.9 50.7 9.1 All Schools 1172 14.6 47.9 11.8 25.7